

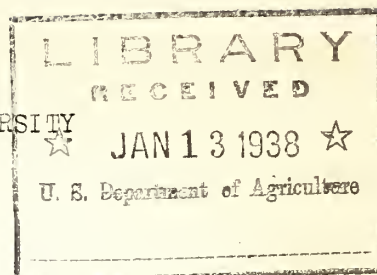
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.9
52597-214
November 24, 1937

LAND GRANT COLLEGE PROGRAM
FROM THE CAMPUS OF THE OHIO STATE UNIVERSITY

MUSIC
Ohio State University Band



GREETINGS

George W. Rightmire, President, Ohio State University

HOW OHIO'S LAND GRANT COLLEGE HAS AIDED
IN MEETING CHANGING CONDITIONS

John F. Cunningham, Dean, College of Agriculture, O.S.U.
H. C. Ramsower, Director, Ohio Agricultural Extension Service
Edmund Secrest, Director, Ohio Agricultural Experiment Station
C. D. Blubaugh, Farmer, Danville, Knox County, Ohio

MUSIC
Ohio State University Band

THE OHIO STATE UNIVERSITY AT WORK
Broadcasts from College of Agriculture Laboratories

A VISIT TO THE UNIVERSITY LIVESTOCK ARENA
With Dr. Carl W. Gay, Chairman, Animal Husbandry Department,
Staff and Students

HOMEMAKER HELPS FROM THE SCHOOL OF HOME ECONOMICS
Miss Nellie Watts, Assistant State Home Demonstration Leader
Mrs. Carl Presar, Farm Homemaker, Wapakoneta, Auglaize Co., Ohio

MUSIC
Ohio State University Men's Glee Club Quartette

HOW OHIO'S LAND GRANT COLLEGE SERVES RURAL YOUTH
Miss Louise McClain and D. R. Jones, Students, College of
Agriculture and Home Economics

A LOOK AT AGRICULTURAL ENGINEERING
Interview with Professor G. W. McCuen, Chairman, Agricultural
Engineering Department

MUSIC
Ohio State University Band

FEARSON (NBC Announcer):

The National Farm and Home Hour.....

MUSIC: Ohio State University Band....."Across the Field," by Melrose

FEARSON:

How do you do, Farm and Home friends. Today we present another program in a series of Land Grant College broadcasts, with our program coming from the Campus of Ohio State University, at Columbus, Ohio.....

To start our program today, it is only fitting that we hear first from the President of this great University.....

Back in 1889, a boy from one of Ohio's rural counties came to Ohio State University. After acquiring a degree in the College of Arts, he enrolled in the College of Law. In 1900, he became the first graduate manager of athletics in the history of the University. Soon after, he was appointed to the University Faculty as an instructor in the Law College. Rising to the rank of full Professor, his work was recognized in 1926, when he was chosen President of the University. Under his leadership, the University has grown to its present size and greatness. It is quite fitting that today's Land Grant College program should honor the President of Ohio State University, Dr. George W. Rightmire.

RIGHTMIRE:

The Ohio State University expresses most cordial greetings to the nation through the Land-Grant College Broadcast which it is originating on this occasion. The University began its career in the autumn of 1873 under the name of The Ohio Agricultural and Mechanical College and opened its doors to 23 students with one large building, still standing and in good condition, about 325 acres of land and a faculty of 7 including the President; today it has a campus of 350 acres, a farm of over 900 acres, 80 buildings, a permanent teaching staff of 654, and enough assistants and graduate assistants to bring the total to 1065, a student body of 13,000, and equipment in proportion. It was the Ohio A. and M. College for 5 years, but in 1878 the name was changed to the Ohio State University, which it has retained ever since. So much to identify us as a responsible member in this Farm and Home Hour Broadcast.

The Land-Grant College grew out of a great need and a great hope. The need was for the technical, scientific and cultural education in hither institutions of learning in those basic activities of a great people, namely, agriculture in all its ramifications, and the mechanic arts with their tremendous expansion into the many fields of engineering. The colleges of the time offered no such types of education. They presented the classical patterns of an educational scheme, fitting men primarily for entering the professions. Agriculture and the mechanic arts did not then have academic respectability. By the time of the great Civil War the need for such education and a new type of college was becoming clearly manifest. The hope or the vision, or call it the great purpose, out of which the land-grant college grew was that in the United States there should never be a peasantry or a proletariat. The people

in Europe had for ages known these two classes as the indispensable work people of their generations, but yet it was never intended that they should rise from those conditions and it was only here and there and at long intervals that a member of these classes in Europe arose to greater things. In a country as extensive as the United States at that time with its undeveloped resources and its incalculable riches, a country teeming with the enthusiasm of personal freedom and liberty, it was inevitable that the need for such higher education would become evident, and the great vision or purpose of freeing the individual to exert his capacity to the utmost was likewise certain to emerge.

We started this educational movement back there sixty to seventy years ago not only to benefit the individual but to benefit the society in which each of us finds his place, to enable each individual in whatever station in life he may have been born to develop his capacity to its limits, to be assisted by the public in so doing so that the level of human comfort and human accomplishment might be steadily raised, and so that each individual might be the better fitted and the more sensitively equipped to take his place in the democratic kind of government to which we had long previously committed ourselves.

Nor do we feel that the men and women of the 60's were wrong in their educational and social and governmental ideals. The contribution of the land-grant colleges has been great, the type of educational training which they have afforded has emphasized the experimental, the laboratory, method of approach in all the activities which feature higher education, and has thereby placed the emphasis upon scientific truth discovered from day to day rather than upon the writings handed down by the philosophers and scientists of the past. An attitude of patient exploration for facts, of conservative judgments, of open-mindedness and cordial regard for the opinions of others, and an open eye for changed conditions and adjustments constantly in progress - these characterize the land-grant college training and it is submitted that better elements could not be introduced into the educational, the social, and the political scene through which we have been passing.

May the dignity of higher education in all those matters which are of interest and benefit to humanity be forever permanently established in our thinking; may the determination to prevent a peasantry and a proletariat in the United States be unalterably fixed; may the laboratory or the experimental method condition all of our educational efforts and programs; and may the high spirit of liberalism which lies back of the land-grant college idea forever motivate our people in their multifarious relations with each other and with the peoples of other nations.

Let us keep these structural thoughts and purposes in our minds as we listen to the specific accomplishments of the land-grant college during the next hour; they will be presented by the members of the faculty of the Ohio State University, the Agricultural Extension Service, and the Agricultural Experiment Station - those three great expressions of the idea that in our civilization education in agriculture and the mechanic arts is fundamental and that both the State and the national government have a responsibility in its perpetuation.

PEARSON:

Thank you very much, President Rightmire. You have just heard the President of the Ohio State University, Dr. George W. Rightmire, present the opening address on our Land Grant College program. And now we want to introduce Friel Heimlich, of the Ohio State University radio station, who, in turn, will introduce the speakers and features on our Land Grant College Program, Mr. Heimlich.

HEIMLICH (WOSU Announcer):

Thank you, Mr. Pearson, and good afternoon, ladies and gentlemen. The years have brought many changes in the science of agriculture and those changes have been met by new teaching methods, new research techniques, and new responsibilities. How the Ohio Land Grant College has met these changing conditions will be described by three leaders of agricultural training. They are Mr. John F. Cunningham, Dean of the College of Agriculture, Mr. H. C. Ramsower, Director of the Agricultural Extension Service, and Mr. Edmund Secrest, Director of the Ohio Agricultural Experiment Station, located at Wooster.

CUNNINGHAM:

The meeting of the Land Grant Colleges and Experiment Stations at Washington last week certainly stirred up a lot of memories. I just wonder, Director Ramsower, how many people realize what these institutions have done to meet the problems of the years.

RAMSOWER:

I have wondered about the same thing, Dean Cunningham. The changes have come very fast. How do you view it from the experiment station, Director Secrest?

SECREST:

Well, it's sometimes hard to convince folks how much they have been helped by the college and experiment station men.

CUNNINGHAM:

The early work of the colleges was, of course, largely observation of cause and effect, but as farming became more intensive, the scientific reasons began to be developed, and farmers began to learn the "why" as well as the "how" of farm operations.

SECREST:

Yes, here in Ohio some of the early research problems were tackled effectively. The soil fertility work of Director Charles E. Thorne has become classic.

RAMSOWER:

Director Secrest, just what do you regard as the outstanding work of your institution?

SECREST:

Well, the work in soil fertility and with varieties of farm crops probably stands out as prominently as anything that has been done. For example, the leading position of Ohio today in hybrid corn work is based largely on the earlier work of Director C. G. Williams.

CUNNINGHAM:

Isn't it true, Director Secrest, that it was the work of the Ohio Experiment Station that showed the farmers of Ohio that plants, like animals, must be fed? That there is no magic in land fertilization -- but just plain horse sense?

SECREST:

Yes, Dean Cunningham, one of the great contributions of the stations and the colleges has been to take the mystery out of farming and substitute understanding in its place.

RAMSOWER:

That same comment will apply to feeding livestock. Experiments in feeding have shown farmers how to balance rations, and how to improve types of animals so as to make greater gains with less feed. This has increased production efficiency. In 1787 nineteen farmers were required to feed one city person. Now, nineteen farmers produce enough food for 56 city people, plus 10 living abroad.

CUNNINGHAM:

That is where the work of scientific agriculture has been of tremendous importance to the entire people, and why the Land Grant Colleges and Experiment Stations continue to deserve such cordial support.

RAMSOWER:

I think that's right, Dean.

CUNNINGHAM:

And although our time is short, we must not overlook the romance that has accompanied some of the great discoveries in the field of agriculture.

SECREST:

Romance in farming is something that few seem to appreciate.

RAMSOWER:

Well, there has been a lot of it and some thrilling stories might be written. Soldiers aren't the only ones who have won battles. Farmers have and are winning them too.

CUNNINGHAM:

Yes, and the fine part of those battles is that they are won by practical intelligence and without bloodshed. When the Hessian fly threatened the wheat crop, our scientists soon worked out its life history, and announced that the fly is not dangerous if wheat is not planted before a certain date. Farmers were quick to realize the importance of this announcement and most wheat is now seeded after the danger of Hessian fly infestation has passed. So, who says farmers will not cooperate if they only understand the facts?

SECREST:

Then, there was the introduction of alfalfa. It was tried in many places and there were many failures. It was known to succeed in river valleys and along the edges of gravel roads. It was suggested that the lime dust from the roads and the limestone gravel in the valleys might have something to do with the case. In following up this hunch, it was found that, where lime is present in the soil, alfalfa will grow, otherwise not. It was also found that seed inoculation was essential.

CUNNINGHAM:

And don't overlook what has been done to control diseases of farm animals.

RAMSOWER:

That's right. Some of the first experiments in preventing hog cholera were conducted at the Ohio State University. And the State has been one of the leaders in the eradication of tuberculosis of cattle. These diseases have wiped out livestock worth many millions of dollars.

SECREST:

There are examples almost without number of how the Land Grant colleges have helped in crop improvement and improved methods of land management. But are we going to overlook some of the leadership that has gone to improve rural living? After all, it is the condition of the rural people that really counts.

CUNNINGHAM:

That's right, Director Secrest. It is not how much one earns, but how he uses his earnings that makes for human happiness. I don't believe that anyone will deny that the Land Grant institutions in Ohio have led in this field.

SECREST:

No, I don't think so.

CUNNINGHAM:

The Farmers' Institutes that have been carried on for almost three score years probably furnished the first great melting pot for rural opinion. Improved farm practices were widely spread through these gatherings. Present-day institutes are a part of the services of the Ohio State University. Last year they had a total attendance of 745 thousand -- almost three-quarters of a million.

RAMSOWER:

Farmers' Institutes are only a part of our extension service program. Since the work was started by A. B. Graham, there has been a remarkable development. Today, we have county agricultural agents in all but one county of the State, assistant agents in 10 counties, home demonstration agents in 42 counties, and 4-H club agents in six counties. But, they couldn't accomplish much without the loyal assistance of thousands of farm and community leaders, and our well developed farm organizations.

SECREST:

We at the Experiment Station, feel that if the Land Grant institutions had done nothing more than bring farm people into thinking groups, their existence and all that they have cost would be fully justified. Extension projects the educational services of the college and spreads the results of station research. So, the three are closely tied together in their main objective.

HEIMLICH:

Excuse me if I interrupt, but Director Ramsower, would you tell what is meant by extending the services of the college?

RAMSOWER:

Well, the development of hybrid corn which Director Secrest mentioned a moment ago is a good illustration.

CUNNINGHAM:

But didn't the experiment station have a hand in that?

SECREST:

Yes, the station has developed corn hybrids which often outyield standard varieties from 10 to 25 bushels.

HEIMLICH:

Did the farmers then come to the experiment station to get the seed?

RAMSOWER:

No, that's where the extension service comes in. You see, the experiment station has made foundation seed stocks available through the extension service to cooperating seed producers in each of the 83 counties. Today, 550 cooperating growers are producing certified seed of adapted hybrids.

HEIMLICH:

Do these farmers then furnish seed to other farmers?

RAMSOWER:

Yes, and in 1938 we expect that between 25 and 35 per cent of the State's corn acreage will be planted with hybrid seed.

HEIMLICH:

Mr. Blubaugh, you are an Ohio farmer. Have you ever grown any of this hybrid corn?

BLUBAUGH:

I sure have -- in fact, I was an apprentice producer of seed in 1936, so now I am producing seed for other farmers.

HEIMLICH:

What do you like best about hybrid corn?

BLUBAUGH:

Well, it has made it possible for me to reduce my corn acreage and still produce more corn.

HEIMLICH:

You have heard what these gentlemen have said about the ways in which the college and the experiment station serve the people---- Do you agree with what they have said?

BLUBAUGH:

Yes, only they haven't told half the story. I say this from experience. Thirteen years ago I took over a 140-acre run-down hill farm in Knox County. It's a profitable farm today, because I learned from the college and the experiment station how to lime and fertilize my land, how to feed my dairy cows, and how to arrange my orchard and my poultry flock.

HEIMLICH:

Well, after this discussion between Dean Cunningham, Director Ramsower, and Director Secrest, and with it all clinched by what Mr. Blubaugh, an Ohio farmer, has just said, I believe the Land Grant colleges and experiment stations have fully justified all their costs. It is fine that we can say this on the occasion of the 75th anniversary of the Land Grant Act and the 50th anniversary of the Hatch Act, under which the experiment stations were established. The men and women who have attended these colleges have contributed their thinking and their energy to rural life and added greatly to the ability of agriculture to meet changing conditions.

From Rehearsal Hall on the University Campus, we present the Ohio State University Concert Band, under the direction of Professor Eugene J. Weigel. The selection is MANIN VEEN, by Haydn Wood.

MUSIC: Ohio State University Band....."Manin Veen," by Haydn Wood.

PEARSON:

This is the November Land Grant College program, coming to you from the Campus of the Ohio State University. This is the National Farm and Home Hour.

(STATION IDENTIFICATION)

HEIMLICH:

Continuing the National Farm and Home Hour, we're going to take you on a mythical tour of the campus, and show you some of the work being done by the various departments of the College of Agriculture here at Ohio State University. The Olentangy River separates the main portion of the campus from the University Farms. As we go across the bridge, we come to an attractive building and several big livestock barns. We enter the massive door of the Animal Husbandry building, where Dr. Carl W. Gay, Head of the Department, invites us to the Livestock Arena. Let's join Dr. Gay.....

GAY:

We will try to bring to you some conception of the daily routine in the Animal Husbandry Department, with students, professors, and livestock participating. Come along with us to the Dairy Barn, where Mr. Salisbury will take charge.

(NOISE OF DAIRY BARN FEED TRUCK RUNNING. BOYS STARTING TO MILK. DAIRY COWS BAWLING FOR FEED. SOUND OF MILK STRIKING BOTTOM OF PAIL.)

SALISBURY:

Here in the Dairy Barn the boys are just starting to milk the three timers. Mr. Denney, the herdsman, is coming up the alley. Denney, how are the cows doing today?

DENNEY:

Okay, milking fine.

SALISBURY:

Since you do all the work with students, do you mind telling us how many work and what they do?

DENNEY:

This quarter we are using sixteen. Each student works three hours a day; some milk, some feed, and others do the cleaning.

GAY:

Who is milking in that box stall?

SALISBURY:

That's Arthur Wisler, a junior.

GAY:

Arthur, that's a good Ayrshire you're milking!

WISLER:

Yes, sir. She holds the world's three year old milk record.

GAY:

Has she ever been shown at the fair?

WISLER:

She was Reserve Grand Champion at Ohio as a 3 year old.

GAY:

How old is she now?

WISLER:

She's 10 and has made over 100,000 pounds of milk. The boys are pretty proud of her.

GAY:

Who is that running the feed cart?

SALISBURY:

That's Ernest Zehner. He was a member of the Dairy Cattle Judging Team at the National Dairy Show.

GAY:

Zehner, how did Ohio do in the contest?

ZEHNER:

We took sixth place judging all breeds, fifth on Brown Swiss, and seventh on Jerseys and Guernseys. We were in pretty fast company, Dr. Gay.

GAY:

I imagine you were. All right, let's go into the Swine Barn, where Mr. Coffey and his men are busy and find out what they are doing.

(SOUND OF PIGS AND OTHER NOISES)

COFFEY:

Hello there. How are you? I want to give you some idea of what is going on in our Swine Barn at the moment. Here's Charley Crabill, a senior student, filling a self-feeder. What do you have here, Charley?

CRABILL:

I'm conducting an experiment on the use of minerals fed in connection with soybean oil meal.

COFFEY:

Any results, yet, Charley?

CRABILL:

No. I've just started the experiment.

COFFEY:

Let's go on down through the barn. Here's Paul Good, another senior student. What are you doing, Paul?

GOOD:

I'm giving these International Livestock Show barrows a good brushing.

COFFEY:

Going to have a good show, Paul?

GOOD:

I wouldn't want to say. It's a big show and a lot of good hogs will be there. We did well enough at the State Fair, having the Grand Champion pen of barrows, as well as many other good awards, but the International is bigger and better.

COFFEY:

Well, good luck to you, Paul. Whoa! Here comes Author Jordan, the herdsman, with a pen of barrows. Where to, Author?

JORDAN:

Over to the Judging Arena for Professor Kays' Livestock Judging Team.

COFFEY:

Looks like a tough class. I believe I'll go along with you. I haven't talked to the judging team boys since they returned from the Kansas City Contest.

GAY:

Mr. Kays, would you call the roll of the Ohio State Livestock Judging Team, the first prize team among 14 college teams in judging horses at the recent American Royal at Kansas City.

KAYS:

These are all Ohio boys: Robert Bernard, New Vienna; Robert Calhoun, Savannah; Robert Dix, Delaware; Marion Everhart, Mechanicsburg; Paul Good, Van Wert; and John Kays, Columbus. Dix and Kays tied for high man in judging horses with a score of 249 out of 250 points. Robert Calhoun was second high man with a score of 248 out of 250 points. Now, let's talk to these boys. Robert Calhoun, what were our winnings with Belgian mares?

CALHOUN:

Ohio State had the first prize three-year-old Belgian mare, also the senior and grand champion mare of the show. In addition, our entries stood first and third in a class of 26 two-year-old mares.

GAY:

I am asking John Kays, who worked in our Horse Barn all summer helping to fit our exhibit, if we had any luck with Belgian stallions.

KAYS:

Yes, Dr. Gay. We had the first prize 2-year-old Belgian stallion, also the Junior Champion stallion of the show, on King Alfred Again. This colt topped his class with 19 stallions competing.

GAY:

Marion Everhart, you're a member of this judging team and interested in shows. What did the University beef cattle do at the Ohio State Fair?

EVERHART:

They did pretty well, winning the Hereford steer championship, the Hereford summer yearling class, and the best three steers; also the Hereford heifer futurity.

GAY:

Bob Dix, you're president of the Saddle and Sirloin Club, the Animal Husbandry student organization. What is your membership this year?

DIX:

Sixty-five.

GAY:

What does a student gain from membership in your Club?

DIX:

Well, I believe it is mighty worthwhile for any student to join. We have quite a program, meetings, discussions, steak-roasts, and, of course, the club sponsors the Little International Stock Show.

GAY:

That's fine. Now, let's go into the Nutrition and Physiology laboratory. Here's Dr. Sutton. He can tell us about the experiments. Dr. Sutton, that's an interesting machine you are operating.

SUTTON:

Yes. With this machine we cut slices of animal tissues for microscopic examination.

GAY:

Just how thick are you cutting those?

SUTTON:

These are fairly thin. We're getting 5,000 slices to the inch.

GAY:

Do you mind if we look into the small animal room?

SUTTON:

Not at all; happy to have you. Here's Howard Kunkle, a senior student, who has much of the responsibility of caring for the animals. He will be glad to tell you about them.

GAY:

Howard, these animals appear to be sick. What ails them?

HOWARD:

They are suffering from Vitamin A deficiency. Notice their sore eyes and the paralysis of the rear limbs. Those are signs of nerve degeneration.

GAY:

Yes. Some of the original work on the effects of Vitamin A deficiency on the nervous system was done in this laboratory. What are these Vitamin A deficient animals being used for?

HOWARD:

We are trying to determine why animals on rations with very little Vitamin A do not reproduce well.

GAY:

That is true for our farm livestock too, isn't it?

HOWARD:

Yes, but the deficiency can be experimentally produced so much quicker in the laboratory rat that it is used as the subject for much of the fundamental work.

GAY:

You fellows certainly get down to the bottom of things, don't you?

HOWARD:

Yes. Some of this is a little deep for me, but I have really learned a lot working here in the lab.

GAY:

This has been most interesting. Thank you very much. I'm sorry that we must hurry along, but we want to see what is going on down at the Meats Laboratory. Our Meats Laboratory is equipped for dressing hogs, cattle, and lambs by students, who also cut and study the carcasses. Although no class is in session, there seems to be much activity in the cooler just off the cutting room.

GAY (Continuing)

(SOUND OF MEAT SAW RUNNING.)

Mr. Kunkle, you have charge of our meats work, tell us what this noise is all about.

KUNKLE:

Dwight Garber, a senior, who is in charge of filling campus orders, is making a lot of this noise. Dwight, tell us what you are doing?

GARBER:

I am hurrying up this call for 430 pork chops for the University Hospital, while my helpers, who are all students, are busy putting up other campus orders. This mechanical band saw cuts all chops the same size without bone splinters and does the work much more rapidly.

GAY:

What are you doing with these beef ribs?

KUNKLE:

They were graded by our Home Economics girls' class this morning and will be served at one of the ten campus dining halls. When we don't have enough or the kind of meat to supply what they require, we buy, but all the orders come to, and are handled by, this laboratory. Last month we bought 29,920 pounds at a cost of \$6,628.

HEIMLICH:

Now, we must leave the Animal Husbandry Department, and return to the Campus proper, re-crossing the river and passing the great Ohio Stadium, seating 80 thousand. Here in our campus studios are Miss Nellie Watts, Assistant State Home Demonstration Leader, and an Ohio farm homemaker, Mrs. Carl Presar (FREEZUR). They are going to tell us something about how the Ohio State University helps homemakers in this State.

WATTS:

We are glad you can be with us from Auglaize County today, Mrs. Presar. From the standpoint of our many rural homemaker friends, it seemed rather sensible to ask you, a rural homemaker representing the women of Ohio as the chairman of their State home extension council, to come in and talk with us. We would like to know whether you feel that Ohio State University is aiding to meet changing conditions in the home and community life of our State.

PRESAR:

I am happy for this privilege. You know, it makes me realize how many things we have just been taking for granted are ours, because the University is thinking of us and helping with our problems.

WATTS:

Of course, helping with these home and community problems is one of the main reasons for having a University. When you and others tell us what your problems are, you guide us in our service to you.

PRESAR:

And this service is appreciated. In addition, the University has proven ideal for the training of our girls. The contributions they make to our home and community life after they return from college can hardly be measured. For one thing, the School of Home Economics has done much to raise the drudgery of keeping house to the vocation of homemaking.

WATTS:

In other words, having daughter take a course in the theory and practice of home economics at the University, is a fine addition to mother's years of practical experience in helping to build a satisfying home and community life?

PRESAR:

Exactly. But we mothers who have not taken a college course in homemaking still feel that we are having the opportunity to acquire some of the fine things the University has to offer.

WATTS:

You mean.....

PRESAR:

Through the University's Agricultural Extension Service. We have found that the term "University Extension" may be taken literally. It is an actual extending of the University to us in our homes and communities through the home demonstration agent located in our county, and the help of specialists she calls in as needed.

WATTS:

You certainly have been active enough in our home extension program to speak with authority, Mrs. Presar.

PRESAR:

We farm homemakers in the counties that have home demonstration agents wonder how we ever got along without one. They help us to understand our problems, then they give us the courage to do something about them, and finally help us to get the information we need.

WATTS:

I'd be interested in knowing a little more about these problems and how the Extension Service -- through its home demonstration agents and specialists -- gives your rural homemakers help with them.

PRESAR:

Well, Miss Watts, wouldn't you say that every homemaker has for her goal, a happy and satisfying home life?

WATTS:

Yes, I would.

PRESAR:

That goal involves so many things. We must have health and an understanding of nutrition and other practices that are essential to health; we need to live in comfortable, convenient and attractive homes and surroundings; we need to be clothed adequately from the standpoint of comfort, cleanliness, appropriateness and economy; we need to know how to bring up our children so that we may be happy in our home relationships and that they may take their place as good citizens in the community. We not only need a degree of economic security, but also knowledge on how to make our incomes give the greatest satisfaction in family living.

WATTS:

That's a big order, Mrs. Presar. How do you women in the county plan your home demonstration program to help you attain these goals?

PRESAR:

The home extension council of the county usually takes time at least once a year to sit down with the home demonstration agent and talk over these problems and to study what progress we have made so far. Next we select the possibilities for the program of the coming year. We present these suggestions to as many rural homemakers as possible and as the result of their final selections, projects are developed to help us to work out our own solutions.

WATTS:

What are some of these projects?

PRESAR:

Sometimes we develop a course of study such as the use of some of home grown foods, parent education, or clothing selection. Again we may have a single demonstration as in the project on the care and cleaning of oil stoves. Sometimes we find that the only way we can work out some problem is for the home agent and perhaps an extension specialist to come to our homes and work with us on it. Such projects as rearranging the kitchen and living room studies, fall in this class.

WATTS:

You know about the bulletins the Ohio Extension Service makes available through the county extension offices, do you?

PRESAR:

Oh my yes. And as soon as the weather gets a little colder so we can butcher, I'll be making use of one of the bulletins on canning beef and pork. I have found that these extension bulletins on home, farm, and 4-H Club subjects cover a wide range of problems, are reliable, and tell us what we want to know in a clear, concise way. My bulletin file is one of the most important parts of our home library.

WATTS:

You were telling me the last time I saw you how much your radio means to you.

PRESAR:

Yes, and I am sure that others feel the same as I do -- that when we listen in to the Homemakers Hour and other farm and home broadcasts, that we are actually members of a large class of the University getting a valuable education in our chosen profession with only the effort of listening in.

WATTS:

Well, we do want to help.

PRESAR:

Bulletins! News stories! Radio! 4-H Club work! Home Demonstration Work! Help? Of course you help!

HEIMLICH:

And now four voices raised in song, a male quartet from the Ohio State University Men's Glee Club, directed by Professor Louis H. Diercks. They sing A SPIRIT FLOWER, by Campbell Tipton.

MUSIC: Ohio State University Men's Glee Club Quartette..... "A Spirit Flower,"
by Campbell Tipton

HEIMLICH:

Miss McClain and Mr. Jones, I notice from the program that during the next 3 or 4 minutes we are scheduled to review some of the ways Ohio's Land Grant College serves the boys and girls and young men and young women of the State. Since both of you are seniors here at Ohio State University, you have probably had enough reviews and quizzes that you won't mind my asking you each a few questions, will you?

JONES:

No, Mr. Heimlich. We'll be glad to answer them..... Won't we, Louise?

McCLAIN:

We'll try.

HEIMLICH:

That's good. All right, Miss McClain, am I right in guessing that your home is on a farm?

McCLAIN:

Yes, over in Licking county.

HEIMLICH:

How about you, Mr. Jones?

JONES:

Yes, only my farm is up in Delaware county.

HEIMLICH:

You say YOUR farm..... Do you mean YOUR farm or your PARENT'S farm?

JONES:

Well, Mother has her own place, and I'm farming 100 acres of my own.

HEIMLICH:

Farming and going to school both must keep you pretty busy.....Miss McClain, I've always heard a lot about 4-H Clubs for boys and girls on the farm..... Have you ever been a 4-H Club member?

McCLAIN:

Yes, before I came to school here; and now I belong to our University 4-H Club.

HEIMLICH:

I've heard about the pig and beef groups of the 4-H Club..... Jones, have you belonged to either of these?

JONES:

I've been a member of both a pig and a beef calf club. But when I was taking vocational agriculture in high school I happen to have also gotten very much interested in our FFA organization.

HEIMLICH:

Let's see, the FFA..... That's the Future Farmers of America organization, isn't it?

JONES:

Yes, high school boys throughout the country who are studying vocational agriculture are organized into groups and call their organization the Future Farmers of America. Along with their school work, they are learning about farming by actually farming and meeting farm problems through a supervised farming program.

HEIMLICH:

This is all very interesting, but are we sticking to our subject of how Ohio's land grant institutions are serving the State's rural youth?

JONES:

I think we are....even though it might be a little indirect.... You are aware, of course, that there are hundreds of high schools in Ohio -- or most any other State for that matter -- where thousands of high school boys and young farmers are getting instruction in vocational agriculture..... Now where do we get these instructors that serve so many communities so well in every part of the State?

HEIMLICH:

I had never thought of it quite that way before..... But I see your point. In other words, we can say that the service of the college of agriculture is extended to high school communities all over the State by training instructors to each vocational agriculture.

McCLAIN:

And the same is true, Mr. Heimlich, of the training provided by the school of Home Economics. These trained young women teach thousands of high school and older girls in, I think, about 200 of our Ohio schools.

HEIMLICH: Does it happen that either or both of you are planning to do vocational teaching when you finish school? Jones, are you?

JONES:

Yes, I hope to.

HEIMLICH:

How about you, Miss McClain?

McCLAIN:

I may, but right now I have hopes of becoming a county home demonstration agent, even though I am doing practice teaching of vocational home economics in one of the high schools near Columbus. During the past 2 summers I have been an assistant extension agent in different counties. I liked the opportunities I had of helping farm homemakers and 4-H Club members discover the things that have meant and that do mean so much to me.

HEIMLICH:

Name us some of those things. will you?

McCLAIN:

Oh, appreciation of good music---folk games and leisure time activities that lend color and interest to life---good books---enjoyment of and hospitality toward friends---and ability to establish a home that is comfortable, as beautiful as possible, well-kept, and satisfying to its members.

HEIMLICH:

I should say that you have your aims for the future well enough in mind.

McCLAIN:

Of course, too, because of my 11 years of interest in 4-H Club work, I will also hope to assist with 4-H Club work in whichever county I might be located. Every county in Ohio has its 4-H Clubs, you know. And there are 53 thousand members in the State.

HEIMLICH:

Yes, 4-H Club work that is fostered by local leaders or advisors under the supervision of county extension agents -- most of whom have been trained at a land grant institution such as Ohio State University -- certainly is mighty worth while. I wish we had more time to visit, but since we don't I should let our listeners know that I have been asking questions for them, of Miss Louise McClain, a senior in the school of Home Economics here at Ohio State University, and of D. R. Jones, a senior in the college of agriculture. Mr. Jones, by the way, whom many of you know as Bobbie Jones, was president of the Future Farmers of America the year before he started to college a little over three years ago.

Here's something that's by way of being a bit extra-special for the listeners of the National Farm and Home Hour. Machinery is taking a larger and larger part in rural life, so important in fact that there is a regular course in agricultural engineering here at the Ohio State University. Our announcer-reporter, Wib Pettegrew, of the staff of WOSU, is now in the Department of Agricultural Engineering, talking to Professor G. W. McCuen. Let's join them in the laboratory.

(PICK UP SOUND OF TRACTOR RUNNING. KEEP RUNNING)

PETTEGREW:

Good afternoon, everyone, we are now in Ives Hall which houses the nationally known Department of Agricultural Engineering at the north end of this great campus. Here we find the chairman of the Department, Professor McCuen, in the laboratory personally directing a college class in -- well, it appears to be farm power studies. Let us ask Professor McCuen a few questions. Professor, can you take time off from your class to tell us something about Agricultural Engineering?

McCUEN:

Let me have those boys throttle that motor down so we can hear ourselves think -- Walter, throttle that motor, please!

(SLOW DOWN TRACTOR. KEEP PICKING UP SOUND.)

Now, Mr. Pettegrew, what did you say?

PETTEGREW:

Could you tell us something about Agricultural Engineering? To start with, what is that class studying?

McCUEN:

That is a class in power machinery.

PETTEGREW:

Are they learning how to adjust and fix tractors? Seems to me that is what they are doing.

McCUEN:

Wib, you evidently have gotten a common impression about Agricultural Engineering in that it deals only with nuts and bolts, grease guns and such. It is much broader in scope than just teaching boys to become mechanics.

PETTEGREW:

Well, isn't one of the biggest problems on the farm that of keeping farm machinery in adjustment and repair?

McCUEN:

True -- that is a problem, but far greater is the problem of having the right kind and right amount of power to efficiently carry on farm operations. Wib, do you realize that agriculture uses more primary power than all industry and mining combined?

PETTEGREW:

Does that mean that farmers are over-powered?

McCUEN:

No, farms on the average are under-powered. Many farmers produce inferior crops, because they are not planted and harvested at the right time -- adequate power is a good crop insurance.

PETTEGREW:

Oh, I see. When farmers have adequate power and machinery they are sure to be successful farmers.

McCUEN:

That is only partially true. A successful farmer must have a balanced program in all of the engineering phases of agriculture.

PETTEGREW:

For example, what?

McCUEN:

This class you observe is studying power machinery. In another class farm buildings are given major consideration.

PETTEGREW:

I hadn't thought about buildings as Agricultural Engineering subject-matter.

McCUEN:

Wib, do you realize that after crops are grown they must be stored? I might say that in Ohio alone the building valuation is equal to the land valuation.

PETTEGREW:

Is that right!

McCUEN:

Furthermore, about one-third of the corn crop in Ohio fails to meet the market grade due to improper storage.

PETTEGREW:

Well, this is interesting. Say, what else does the field of Agricultural Engineering embrace?

McCUEN:

I am just getting started -- crops suffer like human beings when they have wet feet.

PETTEGREW:

I didn't know crops had feet. Maybe they have corns too!

McCuen:

Well, they don't -- but what I am driving at is this: Crops cannot grow and produce on wet ground.

Pettegrew:

Oh -- Right!

McCuen:

We have to provide underground drainage on some soils to get rid of the excess ground water. And for some crops, like potatoes and apples we add water by irrigation methods.

Pettegrew:

Well, first you take water off, then you add water. That seems funny.

McCuen:

It is funny, but quite necessary, as Nature is too generous with rain at times and sometimes stingy when a crop needs it most. Much research is needed in this field.

(DROP IRON BAR ON CONCRETE FLOOR NEAR MICROPHONE.)

Pettegrew:

What on earth was that?

McCuen:

Oh, I guess some freshman dropped his high school ring. He will have to do some searching now.

Pettegrew:

You mentioned research just before the interruption, Professor McCuen. You implied, then, that you are constantly striving to improve things in the field of Agricultural Engineering?

McCuen:

Yes, we have men on the Ohio Agricultural Experiment Staff at Wooster, Ohio.

Pettegrew:

Just what are you doing in the way of research?

McCuen:

We are cooperating with many departments; for example, one of our most pressing problems this year has been the study of drying hybrid seed corn. This is in cooperation with the Department of Agronomy.

PETTEGREW:

Then you do not work alone on these problems? I see some one working on corn over there in the next room. Is he working on this project?

McCUEN:

No. He is working on a project in which we are studying the preparation of feed for animals. This is a cooperative project with animal Science, Veterinary Medicine and Animal Nutrition. We are getting some interesting results through a study of feed mills, animal anatomy, animal physiology, and animal nutrition.

PETTEGREW:

I see considerable electrical equipment over there. Do you use that in research?

McCUEN:

Yes, we have been studying rural electrification problems since 1925.

PETTEGREW:

Then, if my arithmetic doesn't fail me, you have been working 12 years on this problem?

McCUEN:

Yes, and we have learned that rural electrification is a much greater problem than just building lines. It is a research and educational program for economic use of electricity on the farm and in the home.

PETTEGREW:

Is there any other research work in Agricultural Engineering that your department is interested in?

McCUEN:

Yes, I think the problem of fertilizer placement with corn planter attachment has been of greatest economic value to the farmer.

PETTEGREW:

How?

McCUEN:

This project study cost about \$2,000 and has saved the farmer many thousands of dollars in gaining information on where to place the fertilizer for maximum yields of corn.

PETTEGREW:

I did not realize that all these things mentioned were involved in Agricultural Engineering teaching and research. It appears that Agricultural Engineering studies benefit the city as well as rural people in that it assures an abundance of quality crops and produce.

McCUEN:

That is true. We really are trying to do something about controlling the factors to insure adequate production in teaching and research.

PETTEGREW:

It seems to me you are carrying onward and forward.

McCUEN:

That is our policy.

PETTEGREW:

Thanks a lot, Professor Mac. I am sure I am voicing the sentiment of our radio audience when I say: Go to it and more power to you!

(MOTOR AGAIN ROARS. PICK UP SOUND OF TRACTOR MOTOR ROARING.)

HEIMLICH:

Once more, we hear from the Ohio State University Concert Band as they play two Ohio State numbers that are known from coast to coast -- THE BUCKEYE BATTLE CRY and the Alma Mater song, CARMEN OHIO.

(BAND PLAYS - THE BUCKEYE BATTLE CRY and CARMEN OHIO.)

PEARSON: (CLOSING)

Friends, today you have heard another in a series of Land Grant College programs..... which come to you as a presentation of the National Farm and Home Hour..... Today our program came to you from the campus of the Ohio State University, located at Columbus, Ohio..... We now bid you good afternoon, speaking through the National Broadcasting Company.
